

Date: Tuesday, 3/11/2008 11:25:15 AM
 User: Kim Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : WHEEL SHAFT
 Job Number : 37785
 Estimate Number : 10449
 P.O. Number :
 This Issue : 3/11/2008 S.O. No. :
 Prsht Rev. : NC Part Number : D33341
 First Issue : / / Type : MACHINED PARTS Drawing Number : D3334 REV. B1
 Previous Run : 37086 Drawing Revision : B1
 Material :
 Due Date : 3/31/2008 Qty: 8 Um: Each
 Written By :
 Checked & Approved By : JA 08 03 11
 Comment : Est: B 05.03.02 Revised material; Added Powder Coat K
 J/JLM
 Est Rev: C Now on Doosan Lathe 08-03-06 JLM Verified
 By: EC

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description:

1.0 M4140HR3500 4140 Heat Treated Bar



Comment: Qty.: 0.6563 f(s)/Unit Total: 5.2504 f(s)

4140 HEAT TREATED BAR

Material: AISI 4140 or ASTM A304-02/A-434-BC/A193-03-Grade-B7/A29-03/A322-91 or UNS# G41400

(M4140H-R3.500)

Batch: M105801

RD 08/04/30

(10)

2.0 BAND SAW BAND SAW



Comment: BAND SAW

1- Cut blanks: Ø3.500" Bar to 7.750" long

ml 08/05/01

(10)

3.0 DOOSAN LATHE DOOSAN LATHE



Comment: DOOSAN LATHE

1- Turn and Mill as per Folio FA492 and Dwg D3334

2- Deburr

ml 08/05/01

(10)

4.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

ml 08/05/01

(10)

5.0 QC8 SECOND CHECK




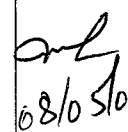

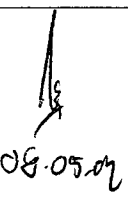

Comment: SECOND CHECK

AB 08-03-02

(10)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3334-1 PAR #: N/A Fault Category: Prod / Mechanical NCR: Yes No DQA: D Date: 28/05/12
 QA: N/C Closed: D Date: 28/05/12

NCR: 37785		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08.04.02	3.0	① OVERALL LENGTH \neq 7.465 ACTUAL = 7.442 ② DIA \neq 3.060 ACTUAL = 3.035	 08.05.02	ACCEPTABLE DEVIATION FOR QSL042	 08/05/02	 08.05.02	 08.05.02	 08.05.02
		ACCEPTABLE DEVIATION FOR QSL042						

NOTE: Date & initial all entries

Date: Tuesday, 3/11/2008 11:25:15 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WHEEL SHAFT

Job Number: 37785

Part Number: D33341

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

POWDER COATING

POWDER COATING



M18052



Comment: POWDER COATING

Powder Coat Fire Red (Ref: 4.3.5.10) as per QSI 005 4.3

Mask thread and bearing surface

08-05-05

7.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

08/05/06

8.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ST494

08/05/06

9.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/05/08

Job Completion



umf 08-05-08

1337785
D33341
06/05/2008
S: 192 10.34
#1 319.5 F
#2 30m US F
#3 F
#4 F

10X

10X

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 37785
Description: Wheel Shaft		Part Number: D3334-1
Inspection Dwg: D3334	Rev: B1	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

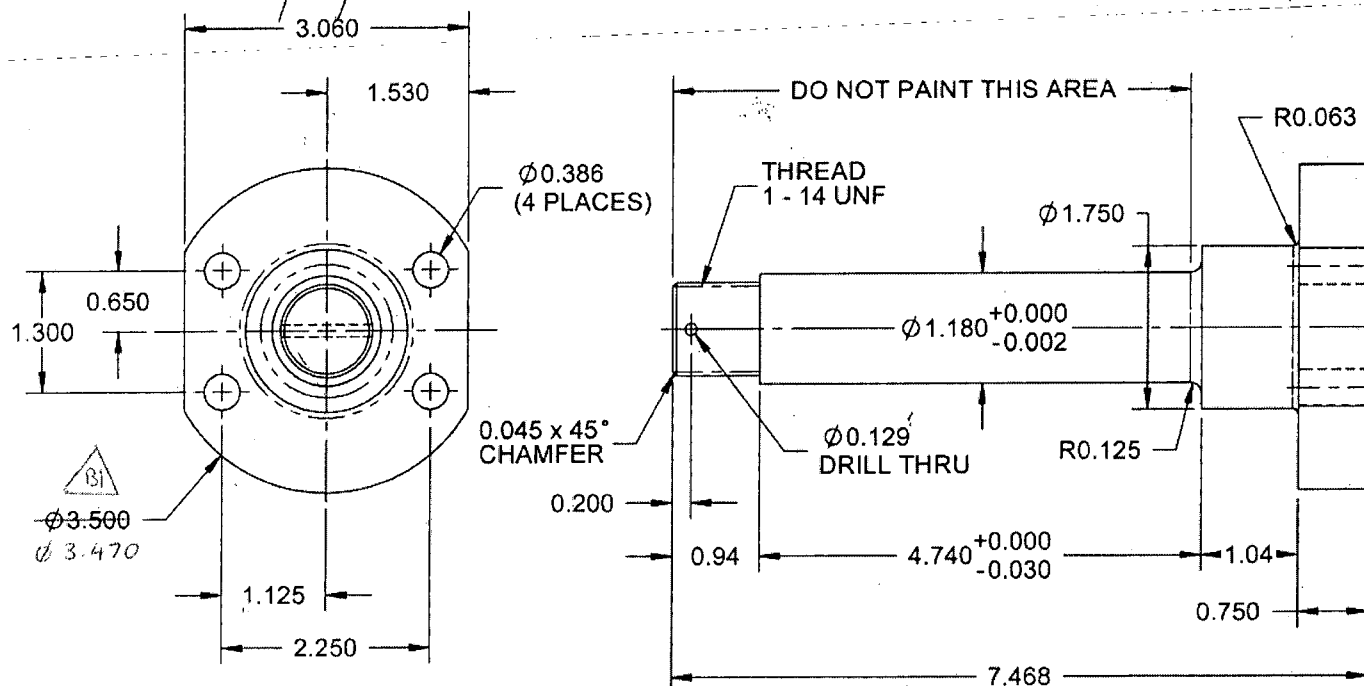
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
7.468	+/-0.010	7.442	✓			ACCEPTABLE per QSI 02
0.94	+/-0.030	.927	✓			
0.200	+/-0.010	.200	✓			
Ø0.129	+0.005/-0.000	Ø.129	✓			
4.740	+0.000/-0.030	4.725	✓			
1.04	+/-0.030	1.040	✓			
Ø1.750	+/-0.010	Ø1.748	✓			
0.750	+/-0.010	.750	✓			
1.180	+0.000/-0.002	1.1781	✓			
2.250	+/-0.005	2.245	✓			
1.125	+/-0.010	1.125	✓			
3.060	+/-0.010	3.060	✓			
Ø0.386	+0.005/-0.000	Ø.390	✓			
1.300	+/-0.005	1.296	✓			
Ø3.470	+/-0.010	Ø 3.471	✓			

Measured by: ml	Audited by: DIP	Prototype Approval:	N/A
Date: 08/05/02	Date: 08/05/02	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	05.04.26	New Issue	KJ/JLM	ml

DART

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3334	REV. B SHEET 1 OF 1
DATE 05.02.18		TITLE WHEEL SHAFT	SCALE 1:2
A	04.12.16	NEW ISSUE	
B	05.02.18	REDESIGN TO FIT NEW WHEEL ASS'Y	
BI	05.03.03	Ø 3.470 WAS Ø 3.500	

RELEASED
[Signature]
05/02/22**D3334-1 WHEEL SHAFT****NOTES:**

- 1) MATERIAL: AISI-4140 OR ASTM A304-02/ A-434-BC/ A193-03-GRADE-B7/ A29-03/ A322-91 OR UNS#-G41400 (REF. DART SPEC. M4140H-R3.500)
- 2) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.010 TO 0.020

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. **37785**

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